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INFORMATION REPORT INFORMATION REPORT

CENTRAL INTELLIGENCE AGENCY

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	S-E-C-R-	E_T	50X1-	HUM
COUNTRY	Poland	REPORT		
SUBJECT	Power Consumption and Machinery of Polish Sulphuric Acid and Superphos Plants	DATE DISTR. phate NO. PAGES	2 3 MAY 1957	
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	acid and superphosphate plants. The	e following subjec	Polish suts are included:	llphuric
	 Electric power consumption 	on (estimated)		
	 Investments Equipment, including auto devices either already in installation. 	omatic regulating astalled or defini	and controlling tely planned for	
	 Investments Equipment, including autodevices either already in 	omatic r egulating nstalled or defini	and controlling tely planned for	JUL 19

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		50X1	-HUM
d.	only The	eral condition of the equipment was very poor. There were no lods set aside for maintenance. The machinery was repaired y after it broke down. Practically no spare parts were available following automatic regulating and controlling devices are in usual planned to be put into use:	• '
	(1)	An automatic machine which analysis gases (SO2) (Automatyczne Analizatory Gasu) and simultaneously records its findings.	
	শ দ	These machines are presently being used at Walbraych and Szczecin. As of June 1956 Urbocz was in the process of installing them.	50X1-HUM
	(2)	A detector of acid impurities in water (Sygnalizacja Zakwaszenia Wody Obiegowej) that is used in cooling acid in all tower processes. This method is still in the planning stage. The machine will detect by means of electric current any conductive acid material or impurities in the water.	1
	(3)	To date the Nitrogen gases NO - NO2 content in the sulphuric acid going through the tower processes is generally tested by the hour. It is planned to set up an automatic testing machine (Badane stezenie nitros kwasu obiegowego).	
	(4)	Automatic heat recorders (Termometry rejestrujace) which register the temperature of the pyrites ovens and the air that cools the oven grates. These are automatic machines which simultaneously record their findings. Szczecin and Walbrzych have these machines while Ubocz is planning to install them.	
	(5)	A machine (Czule aparaty (ciagomierze) rejestrujace) which records and regulates the force of suction in the ovens and gas pipes. This machine is in the planning stage.	
е.	when involved who squite supp	factory itself had little or no authority in establishing or fying fixed procedures, norms, or plans. In very rare cases, total production of the plant, or something of that nature was lved, suggestions could be submitted to the Central Administratio sometimes took action. Government action was very prompt and a effective in revising production and distribution plans when ly of raw material was interrupted or when equipment broke down.	
f.	an en acid venti	sh sulphuric acid plants purchase most of their chemical equipment domestic sources. Ventilators, were coeption to the above. Since the ventilators used in sulphuric plants were lined with hard-rubber, Polish production of these lators is still in the experimental stage.	
	chemi	cal equipment presently being exported by Poland. Since	50X1-HUM
		no chemical equipment being imported from the USSR fect on the Polish chemical industry if the USSR discontinues	50X1-HUM
	exbox	'ts to roland. Un the other hand, aniral conveyons for the	OUXT HOW
	purpo	se of extracting pyrite residues are being imported by the USSR Poland.	
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a. Electric Power consumption at the sulphuric acid and superphosphate plants was estimated as follows: Torun c. 700 KVA Begucice c. 250 " Ponan c. 700 " Wroclaw c. 180 " Walbraych c. 250 " * Ubocs c. 250 " * Gdansk c. 150 " Gliwice c. 180 " Ktelce c. 180 " Ktelce c. 180 " Ktelce c. 180 " Ktelce c. 180 " Sizow c. 700 " 50X1-HUM b. Coal consumption was small since pyrites strike fire. In Szczecin coal was used only for space heating and in the granulation process where about 70-80 kilos of fine coal were consumed per ton of superphosphate granulated. In Lubon consumption for granulation was about 38-80 kilos per ton of superphosphate granulated but there the plant was operating efficiently at full capacity which was not the case at Szczecin. c.	UNTRI	T: Poland		15 April 1957	
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d. General condition of the equipment was very poor. There were no periods set aside for maintenance. The machinery was repaired only after it broke down. Practically no spare parts were available. The following automatic regulating and controlling devices are in use or planned to be put into use:

(1) An automatic machine which analysis gases (SO₂) (Automatyczne Analisatory Gasu) and simultaneously records its findings.

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These machines are presently being used at Walbrzych and Szczecin. As of June 1956 Drbocz was in the process of installing them.

- (2) A detector of acid impurities in water (Sygnalizacja Zakwaszenia Wody Obiegowej) that is used in cooling acid in all tower processes. This method is still in the planning stage. The machine will detect by means of electric current any conductive acid material or impurities in the water.
- (3) To date the Nitrogen gases NO NO2 content in the sulphuric acid going through the tower processes is generally tested by the hour. It is planned to set up an automatic testing machine (Badane stezenie nitros kwasu obiegowego).
- (4) Automatic heat recorders (Termometry rejestrujace) which register the temperature of the pyrites ovens and the air that cools the oven grates. These are automatic machines which simultaneously record their findings. Szczecin and Walbrzych have these machines while Ubocz is planning to install them.
- (5) A machine (Czule aparaty (ciagomierze) rejestrujace) which records and regulates the force of suction in the ovens and gas pipes. This machine is in the planning stage.
- e. The factory itself had little or no authority in establishing or 50X1-HUM modifying fixed procedures, norms, or plans. In very rare cases, when total production of the plant, or something of that nature was involved, suggestions could be submitted to the Central Administration, who sometimes took action. Government action was very prompt and quite effective in revising production and distribution plans when supply of raw material was interrupted or when equipment broke down.
- f. Polish sulphuric acid plants purchase most of their chemical acuipment from domestic sources. Ventilators were an exception to the above. Since the ventilators used in sulphuric 50X1-HUM acid plants were lined with hard-rubber, Polish production of these ventilators is still in the experimental stage. no chemical equipment presently being exported by Poland. Since no chemical equipment being imported from the IBSR no affect on the Polish chemical industry if the IBSR discontinues exports to Poland. On the other hand, spiral conveyors for the purpose of extracting pyrite residues are being imported by the IBSR from Poland.

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